

# ABSTRACT

Methods are provided that are useful in assaying compounds for cognitive enhancing properties, anxiolytic properties, hypnotic properties, or antidepressant properties. These methods involve determining the in vitro efficacy and  $EC_{50}$  of the compounds at defined series of cloned GABA<sub>A</sub> subtype receptors composed of specific variants of  $\alpha$ ,  $\beta$ , and  $\gamma$  subunits in order to develop an activity profile for each compound. Optionally, the binding affinities of the compounds at GABA<sub>A</sub> receptors are also determined. As an additional step the in vivo effects of the compounds may be tested in animal models